

A FEAR AVOIDANCE MODEL IN FACIAL BURN BODY IMAGE DISTURBANCE

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SUMMARY. The quality of life of burn-injured patients can be impaired physically and psychologically. Burn patients who experience facial disfigurement have psychological, social, and economic difficulties living with their appearance in addition to difficulties associated with their medical treatment. The aim of this review was to investigate, within a cognitive behavioural framework, the effect of facial disfigurement on body image and social integration in burn patients. Body image is a complex concept used to express the mental image of a person's physical self. Newell offered a cognitive-behavioural model which drew on clinical studies of phobic disorders, assuming that many of the psychological difficulties in patients who have suffered a threat to their body image are mediated primarily by fear and avoidance. The model proposes two ends of a continuum for disturbed body image: confrontation leading to social integration, and avoidance leading to social isolation. The literature suggests that many of the confrontational and adaptive processes described in the model are likely to be important in addressing facial disfigurement issues in burn patients. However, the conclusions drawn may be entirely speculative until they are confirmed by sufficient robust research evidence.

Introduction

Burn injury is an unforeseen event that constitutes a physical^{1,2} as well as a psychological trauma³⁻⁸ for the person afflicted. It is an example of injury to health, normal social functioning, and appearance and thus makes integration back into society difficult. It is a continuous, traumatic, stressful situation, beginning with the traumatic event of the injury, continuing during hospitalization, which involves severe pain and anxiety, and including emotional difficulties post-discharge.⁹

Recovery after a burn injury is a process of physical, psychological, and social adaptation. The adaptation process is affected by factors pertaining to the individual, the immediate social environment, and the cause of the injury.¹⁰

The face is a psychologically significant area of the body and its disfigurement has been found to have numerous potential psychosocial consequences for patients. The face is a window to our inner selves and represents the entire personality. It is the focus of attention in every social interaction and is intimately connected with verbal or nonverbal communication. Burn patients who experience facial disfigurement as a result of their injury have psychological, social, and economic difficulties living with their appearance together with the difficulties associated with their medical treatment. Their quality of life can be impaired.¹¹⁻¹³

Aim of the study

The aim of this study was to investigate, within a cog-

nitive behavioural framework, the effect of facial disfigurement on body image and social integration in burn patients.

Method

A search of the literature for published articles was performed in the following computerized databases: OVID, MEDLINE, EMBASE, Cochrane Library, BMJ Clinical Evidence, BMJ Journals Collection, Science Direct, Ingenta Connect, Springer Link, Blackwell Synergy, Oxford Journals, and Google. In each search the terms used were: facial disfigurement, body image disturbance, avoidance, facial trauma distress, facial reconstruction distress, coping strategies, and confrontation strategies. The literature search was also performed by hand in the hard copy scientific press. The studies selected to be included in the review were articles written in English that focused on the cognitive behavioural approach in coping with facial disfigurement.

Results

The body image concept

Our body is the most visible part of our self, occupying a central part of our self-perception (i.e. the set of attitudes we hold towards our self). What happens to our body can have an effect on our emotional health and vice versa, since body and mind are closely associated. Any change in our body will invariably cause a temporary or permanent disturbance of our integrity.^{14,15}

Body image is a complex concept used to express the mental image of our physical self. There are various ways of defining and describing body image, incorporating parameters of body perception, psychological functioning, and sociological meaning for both the individual and society. Although the term "body image" is widely used, its specific meaning remains unclear and theoretical. It is formed in a social and personal context and is a dynamic and changing concept: a psychosomatic experience focusing on conscious and unconscious attitudes and feelings. It is always in the process of revision and shaping according to our current situation. It is dynamically incorporated in our psychosexual, psychosocial, and sensorimotor development and is closely related to our self-concept.¹⁶⁻¹⁹

Self-concept (the total perception we hold of self) refers to three major components: self-image (the way we describe ourselves), self-esteem (the way we evaluate ourselves), and ideal self (the way we would like ourselves to be). It is acquired through interaction with other people and constitutes the base on which we function. Self-esteem determines our confidence, behaviour, social interaction, and quality of life.^{14,16,19}

Although what constitutes normal appearance is a purely subjective concept and a clear consensus as to the exact meaning and measurement of self-esteem and body image is still lacking, the literature suggests that they are related and their disturbances have been implicated as an aetiological or contributory factor in depressive, anxiety, interpersonal and deviant behaviour psychological disorders. Low self-esteem frequently accompanies feelings of insecurity, emotional tension, anxiety, avoidance, and social isolation.^{16, 20-24}

Price¹⁷ developed a theoretical body image model which acknowledged its complexity and the fact that our body is constantly changing in interaction with the environment, contributing either positively or negatively to self-concept and self-esteem. This model explains both normal and altered body image, but is not predictive of behaviour change under specific circumstances. The model identifies three related body image components influenced by individual coping strategies and the social support network: "body reality" (the body as it is physically), "body ideal" (our desired body image), and "body presentation" (the body as it is presented to the world), which - when kept in balance - support self-esteem.

The perception of changes in body appearance, normal functioning, and potential as well as the interpretation, psychological adjustment, and adaptation to the changes are very individual and strictly related to socio-cultural values (symbols, stigmata, taboos, religions, sex, age, sexual behaviours, and race) and neurobiological status.^{19,20,23-26} A change does not necessarily constitute a state of altered body image. Our appearance constantly changes in any case, owing to genetic ageing or other environmental circumstances. It is the interpretation of the change

that is important. Altered body image occurs when we are not able to adapt to our appearance. This is reflected in Price's model as unbalance between the three components. The body no longer supports self-esteem and is dysfunctional in its interaction with the environment.

Adaptation encompasses and affects personal body image in an active way; it enables us to adjust to a real and symbolically interpreted environment. Individual coping strategies (conscious and unconscious) and social support networks (family, friends, health professionals) are crucial in body image formation, development, and adaptation.^{17,26}

Newell³⁹ suggested that engaging in social activities with close friends was effective in developing and maintaining resilience and in reinforcing coping strategies and a healthy self-concept. This is important because visibly different individuals may be vulnerable, and supposed adaptation can easily break down with rough handling.^{12,40} It may take years for the individual and the family to come to terms with an altered body image as it is a chronic health problem and relatives may have to face increased emotional demands.^{12,13,17,26,27} The family unit must be dynamic and evolutionary in order to maintain stability and manage the stresses in such chronic health problems.²⁸

Positive perceptions of social support in body image disturbances were found to be related to a lower impact of appearance concerns on lifestyle and a general reduction in perceived worry.²⁹ Nurses play increasingly demanding roles in the promotion of adaptation to illness because they influence a patient's appraisal and coping behaviour.^{13,30,31} Price¹⁷ believes that nurses play an important role in delivering the best body image care. They are in a strategic position for recognizing feelings and emotions, assessing patients' concerns about body image, and, with appropriate training, promoting recovery.^{15,32}

Body image is a complex issue, covering a wide range of health concerns including burn injury, weight control, eating disorders, disruption of neurological function, acute dismemberment, physical deformity, dysmorphobia, and psychiatric disorders.^{18,20,25,29,33-35,39} Psychological issues are not related to burn injury severity and cannot be predicted in a straightforward way.³⁶ Psychological and social indicators are better predictors of psychological distress than burn injury gravity and, parallel to the biomedical goals,¹² psychological treatment goals should also be planned.^{21,24,37,38}

Newell's fear avoidance model

Facial disfigurement in burn patients can be described as "the physical and psychological experience of a person whose face is scarred, blemished, or deformed due to burn injury". Appearance change such as this has a strong potential for altered body image, regardless of age.³⁹

It has been suggested that anxiety is a major element within the psychological context of body image disturbances.^{35,41,42} The anxiety experienced by facially disfigured burn patients has been described as a source of major psychosocial distress causing social disability.^{12,39,43}

Burn patients with facial disfigurement are subjected to repeated visual and verbal assaults, intrusion-invasion of their privacy, disgust, and pity from others, all of which generate feelings of shame, impotence, anger, and humiliation. They have little or no protection, usually adopt avoidance behaviours, and live in a state of psychological distress. They experience considerable difficulty in almost every social interaction, especially first-time meetings.^{12,13,24,44,45} Their burn injury disfigurement also impacts on the quality of life of their partner, who may be even more liable to psychological distress than the person who is actually disfigured.⁴⁶

Rumsey et al.⁴⁷ explored the psychological outcomes of 220 outpatients with disfiguring conditions, including facial burns. The findings of their study suggest that a considerable proportion of the patients experienced psychological difficulties, including depression, social and existential anxiety, a lower quality of life, and social avoidance.

Clarke et al.⁴⁸ obtained similar findings when they surveyed individual concerns, strengths, and difficulties in social functioning coping strategies in 153 patients with disfiguring eye conditions, including burns.

Investigating psychological difficulties amongst plastic surgery ex-patients, including burn victims, following surgery to the face, Newell⁴⁹ reported that social anxiety with associated phobic avoidance was the problem most frequently encountered.

Newell and Marks⁵⁰ suggested that the social difficulties experienced by persons with facial disfigurements might be due to phobic anxiety specific to certain social situations. They compared 112 facially disfigured persons, including burn patients, with 66 with agoraphobia and 68 with social phobia, finding a similarity between the results of persons with facial disfigurements and of those with social phobia.

The similarities found in the above studies, suggest that the social difficulties reported by disfigured persons may be due to phobic anxiety specific to certain social situations rather than to a more generalized anxiety.

Newell^{39,51} offered a cognitive-behavioural approach to body image disturbance in facially disfigured individuals that drew on clinical studies of phobic disorders assuming that many of the psychological difficulties suffered as a threat to body image are mediated primarily by fear and avoidance. He suggested a model based on the hypothesis that the central element in the psychological context of disfigured people is "fear of the changed body and the reactions of others". This fear reflects the fact that a disfigured person is likely to be influenced by the same socio-cultural norms relating to body image as the rest of society. This in turn can contribute to the fact that facially disfigured people have negative feelings about their disfigurement. Fear regarding altered appearance and its meanings rather than the appearance itself perpetuates the difficulties.

The model comprises four further elements: life events, the history of the change in body image, personality, and body image coping strategies. All these elements have a major impact on the process of adapting to a new self-image and of interacting with others.

Newell attempted to distinguish between patients who adapt to facial disfigurement and reintegrate into society and those who fail to do so. Adaptation to facial disfigurement involves the individual moving through a series of confrontations of the disfigured part in various social situations in order to develop more skilled coping strategies. The model proposes two ends of a continuum for disturbed body image: confrontation leading to social integration and avoidance leading to social isolation. Avoidance is regarded as being associated with disturbed body image, whilst confrontation is associated with a body image which is not disturbed.

Although there is ample evidence that the actual responses given to disfigured people in social situations are often negative, the behaviour of facially disfigured people themselves is in part responsible for the social interaction problems. A better quality of social interaction could be achieved by strengthening the social skills necessary for coping with potentially difficult situations and by eliciting a more positive response from others.^{39,52}

Many of the confrontational and adaptive processes suggested in the model were adopted by cognitive-behavioural approaches of treatment, aiming at the elimination or reduction of the avoidance and fear associated with facial disfigurement. These treatments had positive results, incorporating anxiety management and integration of a number of tactics of encouragement (social skills training) of open/frank exposure to feared situations.⁴³

Robinson et al.⁵³ provided evidence of effectiveness by evaluating the impact of a two-day social interaction skills workshop on 64 persons with disfiguring conditions. The results were highly encouraging. However, the authors of the paper do not clearly state the contribution of specific instructions in their skills training. The participants improved their coping strategies, which they reported using successfully in social situations. Social anxiety and avoidance fell after the workshop and the gains were maintained in the long term.

Papadopoulos et al.⁵⁴ demonstrated gains in self-esteem and the development of positive body image and the ability to cope with challenges of disfigurement in comparison to a control group, using this approach.

Newell and Clarke,⁵⁵ working on the hypothesis that cognitive-behavioural therapy helps phobias even with minimum therapist input, investigated the self-management of social anxiety in disfigured people and found that a simple written self-help information guide outlining cognitive-behavioural tactics reduced anxiety and depression scores when compared with a control group.

These findings all confirm that social skills training and cognitive-behavioural therapy are promising interven-

tions consistent with Newell's fear avoidance hypothesis. In particular, it was demonstrated that anxiety was a major element among the psychological difficulties experienced by disfigured persons.

Discussion

Despite the fact that the precise nature of body image and its relationship to self-concept and disturbances related to the structure of the body are not clearly understood, it is important to identify facially disfigured burn patients with body image disturbances since intervention can be beneficial.

Newell's model was based on a cognitive-behavioural approach which investigates the prevalence of psychological difficulties in disfigured persons, the form such difficulties may take, and the effectiveness of action to reduce such difficulties. However, this model is entirely speculative, as also Price's model, and no conclusions can be drawn until there is sufficient research evidence. If this formulation proves to be robust it could be used as a framework to explore the effect of facial disfigurement on body image and social integration and, at the same time, to plan appropriate rehabilitation strategies in burn patients.

The literature suggests that exposure is likely to be important if we address disfigurement issues but there is little evidence to back this up because altered body image studies are problematic and may lead to conflicting results. This is due to: i) atypical samples (limited number of patients and response rate, restricted geographical region) not reflecting sociocultural and racial variables; ii) method-

ological differences (body image measured by a number of different scales and difficulty of addressing at the same time affective, behavioural and cognitive aspects); iii) difficulty of identifying pre-morbid personality, post-trauma or associated disease stress, false expectations of recovery (patients still awaiting or receiving treatment); iv) little evidence of comparison with general population.

Further research focused on burn patients will be necessary in order to clarify the relationship between the psychosocial problems faced by burn patients with facial disfigurement and social phobias, to investigate the effects of the different elements of the action taken and of the contribution of specific instruction in skills training, and to predict the types of individual who are likely to benefit most.

Conclusion

People's reactions to facially disfigured burn patients are unlikely to change so the onus to adapt to the situation will continue to fall on the burn patients themselves. Acceptance of this reality is sometimes hard. This cognitive-behavioural model may be used as a framework to explore the prevalence and the form of such difficulties as well as the effectiveness of action favouring social integration, together with the planning of rehabilitation strategies. The patient's family can be instrumental in promoting rehabilitation, with guidance in graded exposure techniques. Awareness training for health professionals and social skills training for affected patients is recommended. Further research on cognitive behaviour and social skills workshops focused on burn patients are required.

RÉSUMÉ. La qualité de vie des patients atteints de lésions dues aux brûlures peut être diminuée physiquement et psychologiquement. Les patients brûlés qui subissent des déformations du visage ont des difficultés psychologiques, sociales et économiques à vivre avec leur aspect, à part les difficultés liées à leur traitement médical. Les Auteurs de cette étude se sont proposés d'étudier, dans un cadre cognitif-comportemental, l'effet des déformations du visage sur l'image corporelle et l'intégration sociale chez les patients brûlés. L'image corporelle est un concept complexe qui est utilisé pour exprimer l'image mentale physique qu'une personne a de soi-même. Newell a proposé un modèle cognitif-comportemental qui a utilisé des études cliniques sur les troubles phobiques, sur la base du raisonnement que les difficultés psychologiques chez les patients qui ont subi une menace à la propre image corporelle dépendent principalement de la peur et du désir d'éviter les autres. Le modèle propose les deux extrémités d'un continuum comme image du corps lésé: la confrontation, qui conduit vers l'intégration sociale, et l'évitement, qui porte à l'isolement social. Les données de la littérature font penser que beaucoup des processus de confrontation et d'adaptation décrits dans le modèle pourrout être importants pour résoudre les problèmes des déformations du visage chez les patients brûlés. Toutefois, les conclusions qui en déroulent resteront purement hypothétiques jusqu'à la présentation de résultats de recherche suffisamment robustes.

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